08/448727

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Group Art Unit No.: Not Known

Examiner: Not Known

For: RECOMBINANT DNA-DERIVED BORDETELLA TOXIN SUBUNIT ANALOGS

Docket No.: D-242-CIP-C-D

## **INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

As a means of complying with the duty of disclosure, applicant submits a "List of References Cited by Applicant" on a modified PTO-1449 form and provides a copy of each of the listed references for consideration by the Examiner. The relevance of each listed reference is discussed in the following paragraphs.

### CITATION CA

This reference was cited by the Examiner in the parent application as teaching the cloning, expression and immunological properties of the subunit of pertussis toxin.

### CITATION CB

This reference was cited by the Examiner in the parent application as teaching the nucleotide sequence of the pertussis toxin operon and the location of each gene which comprises the operon. (See especially, figure 2 on page 4632).

## **CITATION Cc**

This reference was cited by the Examiner in the parent application as teaching that monoclonal antibodies to the enzymematically active subunit of the diphtheria toxin are immunologically protective, and as teaching methods for the identification of antigenic determinants which are applicable to pertussis toxin.

### CITATION CD

This reference was cited by the Examiner in the parent application as teaching mutagenesis techniques that can be used to create mutations within a gene encoding a desired protein.

Express Mail mail labeling number:	TB 175 927 136 US	Date of Deposit:	May 24, 1995
I hereby certify that this paper or fee is being deposited with the United States Postal Service 'Express Mail Post Office to Addressee' service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Assistant Commissioner of Patents and Trademarks, Washington, D. C. 20231 (Sender's Signature Below)			
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#### CITATION CE

This reference was cited by the Examiner in the parent application as teaching the subcloning of the individual genes comprising the arsenical resistance operon of R-factor R773 in order to separately study the properties of each of the genes and polypeptides encoded by them.

## **CITATION CF**

This article discusses the nucleotide sequences and genetic organization of the pertussis toxin genes, including subunit S1, which is said to contain two regions of eight amino acids homologous to analogous regions in the A subunit of cholera and E. coli heat labile toxins. The article states on page 1261 that the homologous regions may be part of functional domains responsible for the similar catalytic activities of all three toxins, with tyrosine 8 to proline 15 of pertussis subunit S1 being specifically mentioned.

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application. 37 CFR 1.97(b). No fee is owed.

Applicant requests consideration of this information.

Respectfully submitted,

Richard J. Mazza

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Phone: (805) 447-4112 Date: May 24, 1995

Please send all future correspondence to:

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